

The abnormal blades, or fragments of blades, appeared to have originated at the earliest stage of leaf-formation, rather than to have been outgrowths at a later period. Furthermore, a decided disarrangement of the fibrovascular bundles of the midrib suggests a different explanation. Such a condition might result from the cohesion, or rather fusion, of the midribs of two leaves, one superimposed upon the other, the blade of the uppermost being either reduced or fragmentary. But to whatever cause this malformation was due, it is probably one of infrequent occurrence, since none of a like nature is recorded by Masters.

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SHORTER NOTES

A NEW MIKANIA FROM CUBA. — *Mikania alba* sp. nov. Glabrous, except the involucre bracts. Primary branches round, striate, secondary ones hexagonal, canaliculate: petioles 4–6 mm. long, slightly winged; leaf-blades coriaceous, lanceolate-ovate, obtuse at the apex, rounded or obscurely cordate at the base, 4–5.5 cm. long, 1.6–1.8 cm. broad, diminishing in the inflorescence to linear or subulate bracts, three-nerved, the nerves deeply impressed in the reticulate-rugose upper side, prominent on the lower, the margin conspicuously revolute: inflorescence bracted, paniculate, ultimately composed of opposite, widely divaricate racemes, with a terminal one; racemes with 8–24 heads; heads opposite below, alternate above, pedicelled, subtended by a subulate bractlet much exceeding the pedicel; involucre bracts oblong-lanceolate, obtuse, 5–6 mm. long, brownish at the center, becoming transparent towards the ciliate margin, as long as or slightly shorter than the corolla; pappus white, equalling the corolla or nearly so, armed with minute spinules; corolla white, tubular-campanulate, scarcely longer than the involucre bracts, with oblong-lanceolate, acute lobes, thrice shorter than the tube, or less; stamens as long as the corolla, rarely exerted, with cylindrical anthers; style-branches widely divaricate, subsequently recurved-coiling, finely tuberculate: achenes glabrous.

Collected in the Sierra Maestra, at an elevation of 3,400 feet, on Jiquarito Mountain, Sevilla Estate, province of Santiago, Cuba, by the writer on September 18, 1906; no. 516 (type), in herb. New York Botanical Garden.

From a study of the recent monograph of the West Indian species,* we find that the plants most nearly related to *Mikania alba* are evidently *M. papillosa* Klatt of Hispaniola and *M. Swartziana* Griseb. of eastern Cuba.

From the former the new plant presents marked differences in the stem, which is angled in *papillosa*, round in *alba*; in having entire, not lobed leaves as in the Hispaniola plant, and in having a reticulate-rugose instead of a nearly smooth surface as in *papillosa*. The inflorescence in *alba* is paniculate-racemose; in *papillosa*, axillary, solitary, or sometimes a simple raceme. The corolla of the new plant is white, in *papillosa* it is yellow.

The differences between *Swartziana* and *alba* are chiefly in the lanceolate-ovate, not ovate leaves. The pappus of the new plant is scarcely longer than the involucre bracts, in *Swartziana* it is conspicuously so. The corolla lobes in *alba* are thrice shorter than the tube, in *Swartziana* "lobis breviter oblongis erectis tubo toto 5-6plo brevioribus."

The new plant differs from both the older ones in having a subtending bractlet that much exceeds the pedicel.

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REVIEWS

DeVries' Plant Breeding †

This work will be eagerly read by the scientific world and the general public because of the remarkable achievements of Nilsson (made public now for the first time) and also for the impartial and appreciative account of Burbank's work. No less important is the discussion of the principles that underlie plant breeding.

In 1901 Nilsson became director of a private company that had been established in 1886 for the improvement of various agricultural crops in Sweden that were slowly but manifestly de-

* Urban, I. *Symbolae Antillanae seu fundamenta Florae Indiae Occidentalis*. 5: 212. 1907.

† DeVries, Hugo. *Plant Breeding*. Comments on the experiments of Nilsson and Burbank. 8vo. vi + 360. *f. 1-114*. The Open Court Publishing Company. Chicago and London. 1907.